

1 ~~51.~~ (Amended) [The method claimed in claim 1, wherein said step of  
2 preprocessing said data at said central broadcast server, further comprising the step  
3 of:] A method for transmitting data to selected remote computing devices,  
4 comprising the steps of:

5 transmitting data from an information source to a central broadcast server;  
6 preprocessing said data at said central broadcast server, further comprising  
7 the step of:

8 providing data to servers in said central broadcast server;

9 parsing said data with parsers corresponding to said servers;

10 transmitting said data to [said] a content manager for determining how  
11 said data is handled;

12 transmitting said data from said content manager to [said] an  
13 information gateway for building data blocks and assigning addresses to said data  
14 block; and

15 transmitting said data blocks from said information gateway to [said]  
16 a transmission gateway for preparing said data block for transmission to [said]  
17 receivers;

18 transmitting preprocessed data to receivers communicating with said  
19 computing devices; and

20 instantaneously notifying said computing devices of receipt of said  
21 preprocessed data whether said computing devices are on or off.

A2 Sub B1  
1 53. (Amended) The method claimed in claim [54] 37, further comprising  
2 the step of:  
3 utilizing a remote control interface for controlling said viewers.

Please add new claims 82-155 as follows:

1 --82. The method claimed in claim 8, wherein said single function comprises a  
2 single click on said computing device.

1 83. The method claimed in claim 82, wherein said computing device comprises  
2 a computer.

1 <sup>3</sup>84. The method claimed in claim <sup>1</sup>81, wherein said step of transmitting  
2 preprocessed data to remote receivers communicating with said computing devices,  
3 further comprises the step of:  
4 wirelessly transmitting said preprocessed data to remote receivers.

1 <sup>3</sup>85. The method claimed in claim <sup>3</sup>84, wherein said step of wirelessly transmitting  
2 said preprocessed data to remote receivers further comprises the step of:  
3 transmitting said preprocessed data utilizing a paging network.

1 <sup>5</sup>86. The method claimed in claim <sup>3</sup>84, wherein said step of wirelessly transmitting  
2 said preprocessed data to remote receivers further comprises the step of:  
3 transmitting said preprocessed data utilizing a Vertical Blanking Interval.

1 <sup>6</sup>87. The method claimed in claim <sup>3</sup>84, wherein said step of wirelessly transmitting  
2 said preprocessed data to remote receivers further comprises the step of:  
3 transmitting said preprocessed data utilizing a satellite system.

1 <sup>8</sup>88. The method claimed in claim <sup>1</sup>81, wherein said step of transmitting  
2 preprocessed data to remote receivers communicating with said computing devices,  
3 further comprises the step of:

4 transmitting said preprocessed data to remote receivers by wired  
5 transmission.

1 <sup>9</sup>~~89~~. The method claimed in claim <sup>1</sup>~~51~~, wherein said step of preprocessing data  
2 at said central broadcast server, further comprises the step of:  
3 attaching to said preprocessed data an Internet address location of said  
4 preprocessed data for providing to said user an automatic connection back to  
5 said information source for obtaining further information related to said  
6 preprocessed data.

1 <sup>10</sup>~~90~~. The method claimed in claim <sup>9</sup>~~89~~, wherein said Internet address location is  
2 a Uniform Resource Locator.

1 <sup>11</sup>~~91~~. The method claimed in claim <sup>9</sup>~~89~~, wherein said step of attaching to said  
2 preprocessed data an Internet address location of said preprocessed data for  
3 providing to said user an automatic connection back to said information source  
4 for obtaining further information related to said preprocessed data, further  
5 comprises the step of:  
6 providing an automatic connection back to said information source  
7 through an user activating a single function on said computing device.

1 <sup>10</sup>~~92~~. The method claimed in claim <sup>11</sup>~~91~~, wherein said single function comprises a  
2 single click on said computing device.

1 <sup>13</sup> 93. The method claimed in claim <sup>9</sup> 89, wherein said connection back to said  
2 information source for obtaining further information related to said preprocessed  
3 data is an automated wired connection.

1 <sup>14</sup> 94. The method claimed in claim <sup>9</sup> 89, wherein said connection back to said  
2 information source for obtaining further information related to said preprocessed  
3 data is an automated wireless connection.

1 <sup>15</sup> 95. The method claimed in claim <sup>9</sup> 89, wherein said step of attaching to said  
2 preprocessed data an Internet address location of said preprocessed data for  
3 providing to said user an automatic connection back to said information source  
4 for obtaining further information related to said preprocessed data, further  
5 comprises the step of:  
6 determining at said central broadcast server said Internet address location  
7 from said information source.

1 <sup>16</sup> 96. The method claimed in claim <sup>9</sup> 89, wherein said step of attaching to said  
2 preprocessed data an Internet address location of said preprocessed data for  
3 providing to said user an automatic connection back to said information source  
4 for obtaining further information related to said preprocessed data, further  
5 comprises the step of:  
6 attaching said Internet address location to said preprocessed data.

1 <sup>17</sup> 97. The method claimed in claim <sup>9</sup> 89, wherein said step of attaching to said  
2 preprocessed data an Internet address location of said preprocessed data for  
3 providing to said user an automatic connection back to said information source  
4 for obtaining further information related to said preprocessed data, further  
5 comprises the step of:

6 transmitting said Internet address location with said preprocessed data to  
7 said computing device.

1 <sup>18</sup>~~98~~. The method claimed in claim <sup>9</sup>~~89~~, further comprising the step of:  
2 extracting said Internet address location from said preprocessed data at  
3 said computing device.

1 <sup>19</sup>~~99~~. The method claimed in claim <sup>9</sup>~~89~~, further comprising the step of:  
2 displaying said Internet address location with said preprocessed data to  
3 said user such that said user can with a single click on said Internet address  
4 location to obtain additional information from said information source.

1 <sup>20</sup>~~100~~. The method claimed in claim <sup>9</sup>~~89~~, further comprising the step of:  
2 launching an Internet browser and passing said Internet address location  
3 to said browser for automatic connection back to said information source.

1 <sup>22</sup>~~101~~. The method claimed in claim <sup>1</sup>~~51~~, wherein said step of instantaneously  
2 notifying said computing devices of receipt of said preprocessed data whether  
3 said computing devices are on or off, further comprises the step of:  
4 providing at least one alert which when activated allows display of data.

1 <sup>23</sup>~~102~~. The method claimed in claim <sup>22</sup>~~101~~, wherein said at least one alert  
2 comprises a visual alert.

1 <sup>24</sup>~~103~~. The method claimed in claim <sup>22</sup>~~101~~, wherein said at least one alert  
2 comprises an audio alert.

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1 104. The method claimed in claim 51, wherein said step of instantaneously  
2 notifying said computing devices of receipt of said preprocessed data whether  
3 said computing devices are on or off, further comprises the step of:  
4 providing a dockable user interface alert panel on a display  
5 communicating with computing device for providing alerts to said user, wherein  
6 said alert panel is dockable on top of other applications.

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1 105. The method claimed in claim 104, wherein said step of providing a  
2 dockable user interface alert panel on a display communicating with computing  
3 device for providing alerts to said user, further comprises the step of:  
4 displaying fly-in graphics and icon buttons to alert said user that new data  
5 has been received by said computing device.

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1 106. The method claimed in claim 101, wherein said at least one alert is related  
2 to type of information present at computing device.

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1 107. The method claimed in claim 51, wherein said step of preprocessing said  
2 data at said central broadcast server further comprises the step of:  
3 deriving redundant data packets for transmission to said user.

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1 108. The method claimed in claim 107, wherein said step of deriving redundant  
2 data packets for transmission to said user further comprises the step of:  
3 parceling a data block into at least one incoming message.

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30 29  
1 109. The method claimed in claim 108, wherein said step of deriving redundant  
2 data packets for transmission to said user further comprises the step of:  
3 parceling said messages into k information packets.

1 <sup>31</sup>~~110~~. The method claimed in claim <sup>30</sup>~~109~~, wherein said step of deriving redundant  
2 data packets for transmission to said user further comprises the step of:  
3 selecting a number of parity-check packets p.

1 <sup>32</sup>~~111~~. The method claimed in claim <sup>31</sup>~~110~~, wherein said step of deriving redundant  
2 data packets for transmission to said user further comprises the step of:  
3 encoding column-wise with a modified Reed-Solomon code for generating  
4 parity-check packets.

1 <sup>33</sup>~~112~~. The method claimed in claim <sup>32</sup>~~111~~, wherein said Reed-Solomon code is  
2 defined in accordance with:

3 P  
$$g(x) = \prod_{i=1}^P (x + a^i)$$
  
5 I=1

1 <sup>34</sup>~~113~~. The method claimed in claim <sup>32</sup>~~111~~, wherein said step of deriving redundant  
2 data packets for transmission to said user further comprises the step of:  
3 parceling said data packets into code words for transmission to said user.

1 <sup>38</sup>~~114~~. The method claimed in claim <sup>27</sup>~~107~~, wherein said data packets include  
2 information packets and parity-check packets.

1 <sup>36</sup>~~115~~. The method claimed in claim <sup>34</sup>~~113~~, wherein said step of deriving redundant  
2 data packets for transmission to said user further comprises the steps of:  
3 performing error correction and detection on said code words after said  
4 data packets have been parceled.

1 <sup>36</sup>~~116~~. The method claimed in claim <sup>34</sup>~~113~~, further comprising the step of:

2 assembling a data block from said code words.

1 <sup>37</sup> 117. The method claimed in claim <sup>36</sup> 116, wherein said step of assembling a data  
2 block from said code words further comprises the step of:  
3 counting the number of code words which have errors;  
4 determining whether each packet has any errors;  
5 saving packets without error;  
6 discarding packets with at least one error; and  
7 assembling a message when the required number of packets has been  
8 received.

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1 <sup>39</sup> 118. The method claimed in claim <sup>1</sup> 117, wherein said step of preprocessing said  
2 data at said central broadcast server further comprises the step of:  
3 combining Huffman compression and the dictionary-based compression  
4 based algorithms.

1 <sup>40</sup> 119. The method claimed in claim <sup>39</sup> 118, wherein said step of combining  
2 Huffman compression and the dictionary-based compression based algorithms  
3 further comprises the steps of:  
4 scanning input texts;  
5 searching for next item previously seen text;  
6 searching for next item in a static Huffman dictionary; and  
7 choosing said search method which produces a better result for  
8 compression.

1 <sup>41</sup> 120. The method claimed in claim <sup>40</sup> 119, further comprising the step of:  
2 decompressing said compressed data.



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1 ~~121~~. The method claimed in claim ~~51~~<sup>42</sup>, wherein said step of preprocessing said  
2 data at said central broadcast server further comprises the step of:  
3 utilizing a differencing algorithm for compressing said coded data, thereby  
4 significantly reducing the number of bytes sent with each transmission.

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1 ~~122~~. The method claimed in claim ~~51~~<sup>43</sup>, wherein said step of preprocessing data  
2 at said central broadcast server, further comprises the step of:  
3 processing data in accordance with feed type from said information  
4 source.

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1 ~~123~~. The method claimed in claim ~~122~~<sup>43</sup>, wherein said feed type comprises  
2 binary type feeds.

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1 ~~124~~. The method claimed in claim ~~122~~<sup>43</sup>, wherein said feed type comprises  
2 common user information type feeds.

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1 ~~125~~. The method claimed in claim ~~122~~<sup>43</sup>, wherein said feed type comprises feeds  
2 for modifying registry keys which control processing of data.

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1 ~~126~~. The method claimed in claim ~~122~~<sup>43</sup>, wherein said step of processing data in  
2 accordance with feed type from said information source, further comprises the  
3 step of:  
4 using tags to differentiate types of information.

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1 ~~127~~. The method claimed in claim ~~51~~<sup>48</sup>, wherein said step of instantaneously  
2 notifying said computing devices of receipt of said preprocessed data whether  
3 said computing devices are on or off, further comprises the step of:

4           instantaneously alerting said user to personal alerts through the use of  
5   sound, graphics, bit maps or video, wherein said user can instantaneously  
6   access information.

1   <sup>5649</sup>128. The method claimed in claim <sup>1</sup>51, wherein said step of preprocessing data  
2   at said central broadcast server, further comprises the step of:  
3           encoding said data with information relating to message parameters for  
4   filtering.

1   <sup>50</sup>129. The method claimed in claim <sup>1</sup>51, wherein said step of instantaneously  
2   notifying said computing devices of receipt of said preprocessed data whether  
3   said computing devices are on or off, further comprises the steps of:  
4           monitoring said transmissions utilizing multiple viewers;  
5           filtering said transmitted preprocessed data;  
6           post processing said preprocessed data; and  
7           notifying said user instantaneously of receipt of filtered postprocessed  
8   data.

1   <sup>51</sup>130. The method claimed in claim <sup>50</sup>129, wherein said step of filtering said  
2   transmitted preprocessed data further comprises the step of:  
3           filtering said transmitted preprocessed data in accordance with  
4   preferences set by said user.

1   <sup>52</sup>131. The method claimed in claim <sup>51</sup>130, wherein said step of filtering said  
2   transmitted preprocessed data in accordance with preferences set by said user,  
3   further comprises the step of:  
4           setting said preferences with respect to sound, video and animation.

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1 ~~132~~. The method claimed in claim ~~129~~<sup>60</sup>, wherein said step of filtering said  
2 transmitted preprocessed data further comprises the step of:  
3 filtering said preprocessed data in accordance with virtual addresses.

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1 ~~133~~. The method claimed in claim ~~129~~<sup>60</sup>, wherein said step of filtering said  
2 transmitted preprocessed data further comprises the step of:  
3 filtering said preprocessed data in accordance with physical addresses.

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1 ~~134~~. The method claimed in claim ~~129~~<sup>60</sup>, further comprising the step of:  
2 controlling said viewers from said central broadcast server.

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1 ~~135~~. The method claimed in claim ~~51~~<sup>1</sup>, further comprising the step of:  
2 activating said preprocessed data at a scheduled time.

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1 ~~136~~. The method claimed in claim ~~51~~<sup>1</sup>, further comprising the step of:  
2 modifying said preprocessed data instantaneously and wirelessly.

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1 ~~137~~. The method claimed in claim ~~136~~<sup>66</sup>, wherein said step of modifying said  
2 preprocessed data instantaneously and wirelessly, further comprises the step of:  
3 activating services wirelessly through activation codes which enable or  
4 disable services.

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1 ~~138~~. The method claimed in claim ~~134~~<sup>65</sup>, wherein said step of controlling said  
2 viewers from said central broadcast server, further comprises the step of:  
3 adding viewers from said central broadcast server.

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1 ~~139~~. The method claimed in claim ~~134~~<sup>66</sup>, wherein said step of controlling said  
2 viewers from said central broadcast server, further comprises the step of:  
3 removing viewers from said central broadcast server.

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1 <sup>64</sup>140. The method claimed in claim <sup>1</sup>51, further comprising the step of:  
2 postprocessing said preprocessed data.

1 <sup>65</sup>141. The method claimed in claim <sup>64</sup>140, wherein said step of postprocessing  
2 said preprocessed data further comprises the step of:  
3 recombining, decoding and decompressing said preprocessed data.

1 <sup>66</sup>142. The method claimed in claim <sup>1</sup>51, wherein said information source may be  
2 an Internet access provider providing data feeds.

1 <sup>67</sup>143. The method claimed in claim <sup>1</sup>51, wherein said information source may be  
2 an on-line service provider providing data feeds.

1 <sup>68</sup>144. The method claimed in claim <sup>1</sup>51, wherein said step of transmitting said  
2 data from said content manager to said information gateway for building data  
3 blocks and assigning addresses to said data block, further comprises the step of:  
4 building data blocks and assigning addresses to said data block based on  
5 information in a subscriber database.

1 <sup>69</sup>145. The method claimed in claim <sup>60</sup>129, further comprising the step of:  
2 utilizing a remote control interface for controlling said viewers.

1 <sup>69</sup>146. The method claimed in claim <sup>68</sup>145, wherein said step of utilizing a remote  
2 control interface for controlling said viewers further comprises the step of:  
3 launching said remote control interface through a user interface alert  
4 panel.

1 <sup>60</sup>147. The method claimed in claim <sup>60</sup>129, further comprising the step of:

2 storing entries in a viewer server connected to said viewer; and  
3 providing filtering means for filtering particular types of messages a viewer  
4 can look at.

1 <sup>69</sup>~~148~~. The method claimed in claim <sup>1</sup>~~51~~, further comprising the step of:  
2 displaying contextual graphics on said computing device to show data in a  
3 predefined format.

1 <sup>70</sup>~~149~~. The method claimed in claim <sup>69</sup>~~148~~, wherein said predefined format is a  
2 scoreboard.

3  
A 1 <sup>71</sup>~~150~~. The method claimed in claim <sup>1</sup>~~51~~, wherein said step of preprocessing data  
2 at said central broadcast server, further comprises the step of:  
3 attaching to said preprocessed data an Internet address location of said  
4 preprocessed data for providing to said user a message that causes a process or  
5 transaction on said computing device to occur.

1 <sup>21</sup>~~151~~. The method claimed in claim <sup>9</sup>~~89~~, wherein said Internet address is a  
2 proprietary on-line addressing scheme.

1 <sup>7</sup>~~152~~. The method claimed in claim <sup>3</sup>~~84~~, wherein said step of wirelessly  
2 transmitting said preprocessed data to remote receivers further comprises the  
3 step of:  
4 transmitting said preprocessed data utilizing a FM subcarrier, digital,  
5 analog, cellular, GSM or PCS carrier.

1 <sup>72</sup>~~153~~. The method claimed in claim <sup>6</sup>~~51~~, wherein said step of preprocessing said  
2 data at said central broadcast server, further comprises the step of:  
3 sending said data on groups of pooled capcodes.

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1 154. The method claimed in claim 153, wherein said step of sending said data  
2 on groups of pooled capcodes, further comprises the step of:  
3 multiplexing data over multiple capcodes to be reassembled at said user  
4 as if data were being sent over a single capcode.

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1 155. The method claimed in claim 51, wherein said step of preprocessing said  
2 data at said central broadcast server, further comprises the step of:  
3 assigning data packets to a group of capcodes;  
4 transmitting said data over a paging network using said group of  
5 capcodes;  
6 receiving packets at said user on said group of capcodes; and  
7 combining said packets from group of capcodes into one data message.

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-----ADDITIONAL "EMBEDDED URL & ALERT" CLAIMS-----

1 156. A method for transmitting data to a plurality of receivers, comprising the  
2 steps of:  
3 generating data including an Internet address location; and  
4 broadcasting said data including said Internet address location to a user in  
5 communication with one of said plurality of receivers, wherein said Internet  
6 address location is not broadcast in response to a request for said Internet  
7 address location by said user.

1 157. The method claimed in claim 156, further comprising the step of:  
2 providing said user with a direct connection to said location identified by  
3 said Internet address location.

1 158. The method claimed in claim 157, further comprising the step of:

2 providing notification of said Internet address location to said user in  
3 communication with one of said plurality of receivers.

1 159. The method claimed in claim 156, wherein said Internet address location  
2 is a Uniform Resource Locator.

1 160. The method claimed in claim 157, wherein said step of providing said user  
2 with a direct connection to said location identified by said Internet address  
3 location, further comprises the step of:

4 providing a connection to said location through said user activating a  
5 single function on said remote device.

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A 1 161. The method claimed in claim 160, wherein said single function comprises  
2 a single click on said remote device.

1 162. The method claimed in claim 157, wherein said step of providing said user  
2 with a direct connection to said location identified by said Internet address  
3 location, further comprises the step of:

4 providing a wireless connection to said location for said user to obtain  
5 further information.

1 163. The method claimed in claim 157, wherein said step of providing said user  
2 with a direct connection to said location identified by said Internet address  
3 location, further comprises the step of:

4 providing a wired connection to said location for obtaining further  
5 information.

1 164. The method claimed in claim 156, wherein said step of generating data  
2 including an Internet address location, further comprises the step of:

3 determining at a server said Internet address location from a source  
4 providing information to said server.

1 165. The method claimed in claim 164, wherein said step of generating data  
2 including an Internet address location, further comprises the step of:  
3 attaching said Internet address location to said data.

1 166. The method claimed in claim 165, wherein said step of attaching said  
2 Internet address location to said data, further comprises the step of:  
3 embedding said Internet address location within said data.

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A 1 167. The method claimed in claim 156, further comprising the step of:  
2 extracting said Internet address location from said data at said plurality of  
3 remote devices.

1 168. The method claimed in claim 158, wherein said step of providing  
2 notification of said Internet address location to said user in communication with  
3 one of said plurality of receivers, further comprises the step of:  
4 displaying said Internet address location to said user on one of said  
5 plurality of receivers.

1 169. The method claimed in claim 168, wherein said step of displaying said  
2 Internet address location to said user on one of said plurality of receivers, further  
3 comprises the step of:  
4 utilizing a single click on said Internet address location to obtain additional  
5 information from said information source.



1 170. The method claimed in claim 157, wherein said step of providing said user  
2 with a direct connection to said location identified by said Internet address  
3 location, further comprises the step of:

4 launching an Internet browser and passing said Internet address location  
5 to said browser for automatic connection back to said location.

1 171. The method claimed in claim 156, wherein said Internet address location  
2 corresponds to a location on the World Wide Web.

1 172. The method claimed in claim 158, wherein said step of providing  
2 notification of said Internet address location to said user in communication with  
3 one of said plurality of receivers, further comprises the step of:

4 providing an alert to said user in communication with said at least one  
5 remote device.

1 173. The method claimed in claim 172, further comprising the step of:  
2 activating said alert to obtain additional information from an information  
3 source.

1 174. The method claimed in claim 156, wherein said at least one remote device  
2 comprises a paging device.

1 175. The method claimed in claim 172, wherein said alert comprises a visual  
2 alert.

1 176. The method claimed in claim 175, wherein said visual alert comprises the  
2 text of the Internet address location.